none near what appears to be the metropolis of the insect there. The larva seemed unlikely to thrive and was released.

Palustris must be widespread in Lincolnshire. It cannot be due to any exceptional insight on my part that I have found it in all the five sites in which I have looked for it since the capture of my first specimen. There are still several coastal areas between Gibraltar Point and Cleethorpes where I would expect it to occur. There are also many inland marshes, notably around Lincoln and Gainsborough, which would, I am sure, repay a visit. I hope it is not being too naive to hope that some collectors at least will see the greater credit to be obtained by taking a series from a hitherto unknown locality rather than from a site bearing the imprints of innumerable moth traps.

A Melanic Larva of *Lasiocampa quercus* L. ssp. *callunae* Palmer in Caithness, Scotland

By Bernard Kettlewell

Black eggar larvae are found regularly only in two areas of Britain, the Lancashire and Cheshire sand-hills (where such melanic larvae always produce black moths referred to as "*olivacea*") and the Yorkshire moors around Ilkley. Here there are two forms of melanic larvae, "black silky" which always produces melanic imagines, and "chocolate" which give rise to a proportion of these as well as f. *typica*. We have demonstrated that this is the result of "crossing-over" which D. R. Lees showed was 8·9 per cent in one brood and 25·6 per cent in another. The inheritance of all melanic forms, both larval and imaginal is recessive.

Though the frequency of the f. *olivacea* phenotype forms up to 70 per cent of the population in Caithness, no melanic larva has been found in the many thousands we have collected until 1972, when my wife found a solitary one at Breamore in which the ground colour was jet black with lateral white markings. There was a deficiency of the longer hairs. It was highly cryptic as it sat on a heather stem in flower bud. In my opinion this larva was different from both the Yorkshire melanic larvae, chocolate and black silky. Unfortunately it died as a pupa just prior to hatching. I have reproduced a colour print of it in *The Evolution of Melanism* (1973, Clarendon Press). A further point of interest is that the Yorkshire, Lancashire and Caithness "*olivacea*" are each controlled by different genes, though phenotypically they appear similar. On the continent such melanism has been found to exist in Denmark, and also in Eastern Germany.

Genetics Unit, Department of Zoology,
University of Oxford.